SHEET	1	OF	1	

									· - · - · · · · · · · · · · · · · ·	
FORM PTO-144	9 P/		U.S. DEPARTMENT OF COMMERCE FENT AND TRADEMARK OFFICE			٧	SER	IAL NO. 10/625,9	16	
ONF	ONFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		APPLICANT DRAKE et al.							
007 3	1 2000)			FILING DATE July 23, 2003	. 40. 80	GRO	OUP ART		
U.S. PATENT DOCUMENTS										
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE		NAME		CLASS	SUE		IG DATE PPROP.
R	1.	5,534,137	07/09/1996		Rosenbloom		208	390		
K	2.	604,330	05/17/1898		G. F. Kibling					
X	3.	4,116,487	09/26/1978		Yamazaki et al.		299	1		
~	4.	4,216,999	08/12/1980		Hanson		299	57		
·		·								
			FOREIGI	N PATEN	IT DOCUMENTS		- 1			
								SUB	TRANSI	ATION
		DOCUMENT NUMBER	DATE		COUNTRY	CLA	SS	CLASS	YES	NO
										J. N.
		OTHER	R ART (Including	Author, T	Fitle, Date, Pertinent Pa	ages, etc.)			
							-			
										,

EXAMINER	DATE CONSIDERED	2/21/0~
*EXAMINER: Initial if reference considered, whether or not citation is in confi	ormance with MPEP 609; Dra	aw line through citation if not in conformance and

not considered. Include copy of this form with next communication to applicant.

J:\4471\-1\-div\-con\IDS-02-1449.wpd

SHEET	1	OF	1

FORM PTO-1449

U.S. DEPARTMENTAL COMMERCE PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)

ATTY. DOCKET NO. 4471-1-DIV-CON	SERIAL NO. 10/625,916
APPLICANT DRAKE et al.	
FILING DATE July 23, 2003	GROUP ART

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
Y	1.	4,055,959	11/01/77	Fritz	. 61	85	
	2.	4,099,388	07/11/78	Hüsemann et al.	61	85	
	3	4,911,578	03/27/90	Babendererde	405	146	
	4.	5,051,033	09/24/91	Grotenhofer	405	147	
V	5.	5,141,363	08/25/92	Stephens	405	150.1	
	6.	5,174,683	12/29/92	Grandori	405	145	
N	7.	6,003,953	12/21/99	Huang et al.	299	85.1	

FOREIGN PATENT DOCUMENTS

				SUB	TRANSL	ATION
DOCUMENT NUMBER	DATE	COUNTRY	CLASS	CLASS	YES	NO
				7		h IIV

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

0	8.	Stack, Barbara; Handbook of Mining and Tunneling Machinery (John Wiley & Sons 1982), pp. 283, 311.

EXAMINER	DATE CONSIDERED	2/11	64	
*EXAMINER: Initial Leterence considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.				

SHEET	1	OF	1

FORM	DTO.	1440
FURIN	P 1 U-	1443

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)

ATTY. DOCKET NO. 4471-1-DIV-CON	SERIAL NO. 10/625,916
APPLICANT DRAKE et al.	
FILING DATE July 23, 2003	GROUP ART

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
V	AA	2003-0160500 A1	08/28/03	Drake et al.			01/09/03
			· · · · · · · · · · · · · · · · · · ·		ļ	<u> </u>	

FOREIGN PATENT DOCUMENTS

						CUD	TRANSLATION	
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	YES	NO
~	AB	WO 01/69042 A1	09/20/01	РСТ	E21D	11/10		
•								ļ —

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

JI I I	•	
11 1 · · · · · · · · · · · · · · · · ·		
f1 I L		
ll I K		
II I		
19 1 1		
11 1 5		
<u> </u>		

EXAMINER	DATE CONSIDERED 220
*EXAMINER: Initial if reference considered, whether or not citation is in conformation considered. Include copy of this form with next communication to applicant	

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)

ATTY. DOCKET NO. 4471-1-DIV-CON	SERIAL NO. Not Yet Assigned		
APPLICANT DRAKE et al.			
FILING DATE	GROUP ART		

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.
· Mi	1	6,206,478	03/27/01	Uehara et al.	299	33	
(2	6,027,175	02/22,00	Seear et al.	299	18	
	3	6,017,095	1/25/00	DiMillo	299	56	
	4	5,890,771	4/6/99	Cass	299	31	
	5	5,879,057	03/09/1999	Schwoebel et al.	299	17	
	6	5,852,262	12/22/98	Gill et al.	181	106	
	7	5,831,934	11/3/98	Gill et al.	367	25	
	8	5,697,676	12/16/97	Kashima et al.	299	60	
	9	5,330,292	07/1994	Sakanishi et al.	299	1.05	
	10	5,211,510	5/18/93	Kimura et al.	405	184	
	11	5,205,613	4/27/93	Brown, Jr.	299	31	
	12	5,125,719	6/30/92	Snyder	299	31	
	13	4,946,579	08/07/90	Sury	210	705	
•	14	4,856,936	08/15/1989	Hentschel et al.	405	145	ļ
	15	4,808,030	2/28/89	Takegawa	405	146	
	16	4,793,736	12/27/88	Thompson et al.	405	146	
	17	4,774,470	09/1988	Takigawa et al.	175	50	
	18	4,607,889	8/26/86	Hagimoto et al.	299	33	
	19	4,603,909	8/5/86	LeJeune	299	7	
	20	4,505,516	3/19/85	Shelton	299	2	
	21	4,494,799	1/22/85	Snyder	299	31	
	22	4,486,050	12/4/84	Snyder	299	18	
	23	4,458,947	07/1984	Hopley et al.	299	11	
	24	4,445,723	05/1984	McQuade	299	11	
\sim	25	4,440,449	04/1984	Sweeney	299	11	

EXAMINER	DATE CONSIDERED
*EXAMINER: Initial if reference considered, who not considered. Inotate copy of this form with n	her or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and ext communication to applicant.

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT
(Use several sheets if necessary)

THE PROPERTY OF COMMERCE
4471-1-DIV-CON

APPLICANT
DRAKE et al.

FILING DATE
Herewith

GROUP ART

~	26	4,209,268	06/24/1980	Fujiwara et al.	405	147	
/	27	4,203,626	5/20/80	Hamburger	299	33	
	28	4,167,290	9/11/79	Yamazaki et al.	299	1	
	29	4,152,027	5/1/79	Fujimoto et al.	299	1	
	30	4,072,018	.02/1978	Alvarez-Calderon	264	32	
	31	4,067,616	1/10/78	Smith et al.	299	7	
	32	3,960,408	6/1/76	Johns	299	19	
	33	3,941,423	3/2/76	Garte	299	8	
	34	3,888,543	06/1975	Johns	299	11	
	35	3,784,257	1/8/74	Lauber et al.	299	31	
	36	3,778,107	12/11/73	Haspert	299	11	
	37	3,678,694	7/25/72	Haspert	61	84	
٢	38	3,034,773	5/15/62	Legatski	262	2	

FOREIGN PATENT DOCUMENTS

			·			SUB	TRANSL	ATION
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	CLASS	YES	NO
٢	39	2,358,805	01/24/01	Canada	E21C	41/26	х	
ĺ	40	2,332,207	01/24/01	Canada	E21C	41/26	х	
	41	2,315,596	05/04/00	Canada	B03B	9/02	х	
	42	2,222,668	11/26/97	Canada	C10G	1/04	x	
	43	2,124,199	11/22/91	Canada	803B	9/02	х	
	44	1,167,238	05/15/84	Canada	B01J	8/10	х	
1	45	1,165,712	04/17/84	Canada	C10G	1/04	×	
	46	986544	3/30/76	Canada				

EXAMINER (DATE CONSIDERED 2 21/14	
	or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and ommunication to applicant.	ಶ

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 4471-1-DIV-CON	SERIAL NO. Not Yet Assigned	
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	APPLICANT DRAKE et al.		
	FILING DATE Herewith	GROUP ART	

سير	47	986146	3/23/76	Cenada		

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

M	48	Babendererde et al., "Extruded Concrete Lining - The Future Lining Technology for Industrialized Tunnelling," 2001 RETC Proceedings, Chapter 55, pp. 679-685.
.1	49	Becker, C., "Recent Application of Slurry- and EPB-Technique in Europe," 1999 RETC Proceedings, Chapter 48, pp. 857-864.
	50	Becker, C., 'The Fourth Tube of the Elbe-Tunnel – Built by the World's Largest Soft Ground Tunnelling Machine, 2001 RETC Proceedings, Chapter 17, pp. 182-186.
	53	Becker, C., "The Choice Between EPB- and Slurry Shields: Selection Criteria by Practical Examples," 1995 RETC Proceedings, Chapter 31, pp. 479-492.
	52	Bergling et al., "Main Bearings for Advanced TBMS," 1995 RETC Proceedings, Chapter 32, pp. 493-508.
	53	Borm, G., "Integrated Seismic Imaging System for Geological Prediction Ahead in Underground Construction," 2001 RETC Proceedings, Chapter 22, pp. 263-271.
	54	"Canadian coal given the TBM treatment at Cape Breton"; Reprinted from Tunnels & Tunnelling, May 1985; 4 pgs.
	55	CHOA Conference - December 6, 2000 - Program.
	56	Corti et al., "Athabasca Mineable Oil Sands: The RTR/Gulf Extraction Process Theoretical Model of Bitumen Detachment," The 4th UNITAR/UNDP International Conference on Heavy Crude and Tar Sands Proceedings, Vol. 5, Edmonton, AB, Aug. 7-12, 1988, pp. 41-44, 71.
	57	Dowden et al., "Coping with Boulders in Soft Ground TBM Tunneling," 2001 RETC Proceedings, Chapter 78, pp. 961-977.
	58	Doyle et al., "Construction of Tunnels in Methane Environments," 1991 RETC Proceedings, Chapter 12, pp. 199-224.
	59	Drake, R., "An Innovative Approach for the Underground Mining of Oil Sands," presented at North American Tunneling 2002, Seattle, WA May 2002 and NARMS-TAC 202, Mining and Tunneling Innovation and Opportunity Conference, Toronto, Ontario, July 2002, 8 pages.
	60	Drake et al., "A Promising New Concept for Underground Mining of Oil Sands," technical papers presented to Canadian Institute of Mining (CIM), Ft. McMurray, June 13-15, 2001, pp. 1-16.
	61	Friesen et al.; "Monitoring of Oil Sand Slumes by On-line NIR Spectroscopy"; Petroleum Society of CIM & Aostra; paper no. 94.10; 9 pages.
1	62	Funasaki et al., "World's Largest Slurry Shield Tunneling Report in Trans-Tokyo Bay Highway Construction," 1997 RETC Proceedings, Chapter 36, pp. 591-604.
K	63	Guetter et al., "Two Tunnels in Totally Different Geological Formations Driven by the Same 7M Double-Shield TMB with an Extremely Thin-Walled Monoshell Honeycomb Segmental Lining System," 2001 RETC Proceedings, Chapter 21, pp. 241-260.

EXAMINER			DATE CONSIDERED	2/2/04			
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and							

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)

ATTY. DOCKET NO. SERIAL NO. Not Yet Assigned

APPLICANT DRAKE et al.

FILING DATE Herewith

4	64	Harris et al.; "FeasibilityStudy of Underground Mining of Oil Sand"; AOSTRA Seminar on Underground excavation in Oil Sands; May 19, 1978; 33 pages.
·	65	Herrenknecht et al., "The New Generation of Soft Ground Tunnelling Machines," 1999 RETC Proceedings, Chapter 36, pp. 647-663.
	66	Higashide et al., "Application of DOT Tunneling Method to Construction of Multi-Service Utility Tunnel Adjacent to Important Structures," 1995 RETC Proceedings, Chapter 34, pp. 527-541.
	67	Hignett et al.; "Tunnelling Trials in Chalk: Rock Cutting Experiments"; TRRL Laboratory Report 796; 1977.
	68	Hunter et al.; "Design, development, and verification of a Lovat 7.6-metre full-face tunnel-boring machine"; <u>CIM Coal</u> <u>Developments</u> ; 8 pages.
	69	"Improving Profitability With New Technology," Joint Paper Between Petrel Robertson and Oil Sands Underground Mining, Inc., Edmonton, Alberta, September 2001, 44 pages.
	70	Jacobs et al., "Hydrogen Sulfide Controls for Slurry Shield Tunneling in Gassy Ground Conditions – A Case History," 1999 RETC Proceedings, pp. 221-239.
	71	Llu et al.; "Volume reduction of oil sands fine tails utilizing nonsegregating tailings"; Tailings and Mine Waste '98; pps. 73-81.
	72	Lovat Inc. Company Brochure
	73	Maciejewski; "Hydrotransport - An Enabling Technology for Future Oil Sands Development"; Syncrude Canada Ltd.; pps. 67-79.
	74	Marcheselli et al., "Construction of the 'Passante Ferroviario' Link in Milano, Lots 3P - 5P - 6P Excavation by Large Earth Pressure Balanced Shield with Chemical Foam Injection," 1995 RETC Proceedings, Chapter 36, pp. 549-572.
	75	Marsh et al.: "Design, Excavation, Support of a Large Diameter Coal Mine Access Decline Using a Tunnel Boring Machine"; Chapter 11; RETC Proceedings, Vol. 1; pps. 155-176.
	76	Matthews et al.; "Development of composite tailings technology at Syncrude Canada"; Syncrude EDM Research; 2000; pps. 455-463.
	77	McCormick et al.; "Analysis of TBM Performance at the Record Setting River Mountains Tunnel #2; Chapter 8; 1997 RETC Proceedings; pps. 135-149.
	78	Mikula et al.; "Oil Sands Conditioning, Bitumen Release Mechanisms, and New Process Development"; Alberta Oil Sands Information Services; 1993; 8 pgs.
	79	Mikula et al.; "Commercial Implementation of a Dry Landscape Oil Sands Tailings Reclamation Option: Consolidated Tailings"; Alberta Oil Sands Information Services; No. 1998.098; pps. 907-921.
	80	Mitsublshi Shield Machine Article; by Mitsubishi Heavy Industries, Ltd.; 33 pages.
	81	Moulton et al., "Tunnel Boring Machine Concept for Converging Ground," 1995 RETC Proceedings, Chapter 33, pp. 509-523.
	82 .	Oil Sands Underground Mining, Inc., "A New Technology for the Recovery of Oil Sands," presented at combined Oil Sands Task Force and Black Oil Pipeline Network Meeting, June 2001, 30 pages.
V	83	Oil Sands Underground Mining, Inc., "Underground Mining of Oil Sands," presented at National Oil Sands Task Force, January 2001 Quarterly Meeting, 38 pages.

EXAMINER	5//	DATE CONSIDERED	2/21/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.